

<p>90-295017/39 KANSAS/PAINT KK AB1 G03 (A18) KAPA 08.02.89 *JO 2208-382-A 08.02.89-JP-028850 (17.08.90) C091-07/02 Water repellent pressure sensitive adhesive sheet - Includes water repellent coating layer contg. polymer of fluoroalkyl gp. contg. (meth)acrylate monomer and opt. silicone C90-127464</p>	<p>A(4-E10D, 12-A1, 12-A5) G(2-A5D, 3-B4)</p>
<p>A water repellent pressure sensitive adhesive sheet is a multi-layer sheet comprising (A) a water repellent coating layer, (B) a base sheet layer, (C) a pressure sensitive adhesive layer and (D) a releasing sheet layer, in which (A) comprises (a) polymer comprising fluoroalkyl gp contg. (meth)acryl monomer of formula (I), opt. (b) silicone contg. polymerisable unsatd. monomer of formula (II)</p> $\begin{array}{c} R_1 \quad O \\   \quad    \\ CH_2=C-C-O-(CH_2)_l-R_f \end{array} \quad (I)$ $\begin{array}{c} R_2 \\   \\ CH_2=C-R_3 \end{array} \quad (II)$ <p><math>R_1, R_2 = H</math> or methyl; <math>l =</math> integer of 1-11; <math>R_f = C_{F_{2m+1}}</math>, or <math>-C_nF_{2n}H</math>. <math>m =</math> integer of 1-20.</p>	<p><math>n =</math> integer of 1-20, <math>R_3 =</math> gp. of formula (I)</p> $\left[ \begin{array}{c} C-O \\   \quad   \end{array} \right]_j - (CH_2)_k - Si \begin{array}{c} \diagup \quad \diagdown \\ (CpH_{2p+1})_r \\ (OC_qH_{2q+1})_s \end{array} \quad (I)$ <p><math>j = 0</math> or 1, <math>k =</math> integer of 0-5, <math>q =</math> integer of 1-20, <math>r =</math> integer of 0-2, <math>s =</math> integer of 1-3, and <math>r + s = 3</math>, and (c) particles of ave. dia. of at least 5<math>\mu</math>m.</p> <p><b>USE/ADVANTAGE</b> The sheet prevents ice and snow adhesion on objects and involves only sticking the sheet instead of using a troublesome coating operation.</p> <p><b>EXAMPLE</b> On the other side of a plasticized PVC sheet (B), a pressure sensitive adhesive layer (C) comprising mainly poly-2-ethylhexylacrylate was formed, on which a releasing agent</p> <p>J02208382-A+</p>

layer (D) was formed. On the other side of (B) a primer layer (E) comprising mainly ethylcellulose was formed on which a water repellent layer (A) comprising (a) obtd. by copolymer of 2-perfluorooctylethylmethacrylate, 2-perfluorooisononyl-ethylmethacrylate,  $\gamma$ -methacryloyloxypropyltrimethoxysilane, in hexafluorometaxylene and (c) hydrophobic silica fine powder with other solvent was formed by airspraying and drying to obtain the sheet. Contact angle of the surface was  $138^\circ$ . The sheet exhibited good weatherability, water proofness and flexural resistance. (9ppw11HWDwgNo0/0)

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